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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,027	02/28/2002	Adam W. Smith	MS1-861USC1	6939

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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2194

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/087,027	Applicant(s) SMITH ET AL.	
	Examiner Charles E. Anya	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-41 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/8/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-41 are pending in this application.
2. In view of the Appeal Brief filed on 12/01/06, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-4 and 11-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 1 is directed to software architecture, and is software per se. The software architecture is not a process, a machine, a manufacture or a composition of matter. In contrast, a claimed computer-readable storage medium encoded with instruction for enabling application, application program interface and common language runtime layer to handle requests submitted by remote devices, access network and translate Web application into an intermediate language are computer elements with defined structural and functional interrelationships. The structural and functional interrelationship allows the claim to be classified as a machine and the functionality to be realized and thus statutory. Accordingly, appropriate correction or amendment is required. This rejection is applicable to claim 11.

5. Claims 1-17,19-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is a common language runtime layer that can translate Web applications written different languages into an intermediate language supported by the common runtime layer” which is not a tangible result because neither a practical application claimed nor final result available for use. This rejection is applicable to claims 1,5,11,19,24,26,31 and 36.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4 and 19-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms are not clearly claimed:

“a common language runtime layer that can translate Web applications written different languages into an intermediate language supported by the common runtime layer” does not have any relationship or communication with the application and application program interface on lines 7 and 9 of claim 1. The same rejection is applicable to claims 19,24,26,31 and 36.

The word “can” on lines 12 of claim 1 makes the claim limitation unclear because it is definitive that the common language runtime layer would translate the Web applications. The same rejection is applicable to claims 5,11,24,26,31 and 36. However, this can be corrected by deleting the word “can”.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-8,10-16,19-22,24,25,31-34 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,792,605 B1 to Roberts et al. in view of U.S. Pub. No. 20020112078 A1 to Yach.

9. As to claim 1, Roberts teaches a software architecture for a distributed comprising system comprising: an application configured to handle requests submitted by remote devices over a network (figure 1 Applications A/B, Web Services Provider C Col. 5 Ln. 1 – 24); and an application program interface to present functions used by the application to access network and computing resources of the distributed computing system (“...web services engine...” (service drivers) Col. 5 Ln. 1 – 24, Col. 5 Ln. 53 – 67, Col. 9 Ln. 35 – 58).

Roberts is silent with reference to a common language runtime layer that can translate Web applications written different languages into an intermediate language supported by the common runtime layer.

Yach teaches a common language runtime layer that can translate Web applications written different languages into an intermediate language supported by the common runtime layer (Translator 220 page 4 paragraph 0036).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Roberts with the teaching of Yach because the teaching of Yach would improve the system of Robert by providing a method for

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eliminating the complexities between different runtime program environments and thus integrating their inter-relationship (Yach page 1 paragraphs 0004/0005).

10. As to claim 2, Roberts teaches the software architecture as recited in claim 1, wherein the distributed computing system comprises client devices and server devices that handle requests from the client devices, the remote devices comprising at least one client device (Col. 6 Ln. 14 – 19).

11. As to claim 3, Roberts teaches the software architecture as recited in claim 1, wherein the distributed computing system comprises client devices and server devices that handle requests from the client devices, the remote devices comprising at least one server device that is configured as a Web server (Col. 5 Ln. 25 – 52, Col. 6 Ln. 14 – 19).

12. As to claim 4, Roberts teaches the software architecture as recited in claim 1, wherein the application program interface comprises: a first group of services related to creating Web applications (Col. 7 Ln. 50 – 67, Col. 9 Ln. 27 – 35); a second group of services related to constructing client applications (Col. 14 Ln. 30 – 46); a third group of services related to data and handling XML documents (Col. 10 Ln. 1 – 9, Ln. 59 – 67); and a fourth group of services related to base class libraries (Col. 6 Ln. 7 – 9, Col. 8 Ln. 29 – 38, Ln. 64 – 67).

13. As to claim 5, see the rejection of claim 4 above.

14. As to claim 6, Roberts teaches the application program interface as recited in claim 5, wherein the first group of services comprises: first functions that enable construction and use of Web services (Col. 9 Ln. 27 – 35); second functions that enable temporary caching of frequently used resources (Col. 11 Ln. 1 – 5); third functions that enable initial configuration (Col. 7 Ln. 11 – 15); fourth functions that enable creation of controls and Web pages (Col. 14 Ln. 30 – 46); fifth functions that enable security in Web server applications (Col. 6 Ln. 7 – 9, Ln. 48 – 67, Col. 7 Ln. 50 – 56); sixth functions that enable access to session state values (Col. 6 Ln. 23 – 27).

15. As to claim 7, Roberts teaches the application program interface as recited in claim 5, wherein the second group of services comprises: first functions that enable creation of windowing graphical user interface; and second functions that enable graphical functionality (Col. 14 Ln. 30 – 46).

16. As to claim 8, Roberts teaches the application program interface as recited in claim 5, wherein the third group of services comprises: first functions that enable management of data from multiple data source (Col. 5 Ln. 25 – 43); and second functions that enable XML processing (Col. 5 Ln. 25 – 37, Col. 10 Ln. 1 – 9, Ln. 59 – 67).

17. As to claims 10 and 11, see the rejection of claims 5 and 1 respectively.

18. As to claim 12, Roberts teaches the distributed computer software architecture as recited in claim 11, further comprising a remote application configured to be executed on one of the remote computing devices, the remote application using the application programming interface to access the networking platform (figure 1 Web Service Engine 101 Col. 4 Ln. 60 – 67, Col. 5 Ln. 1 – 25).

19. As to claims 13-16, see the rejection of claims 4,6 and 7.

20. As to claim 19, Roberts teaches the system comprising: means for exposing a set of functions that enable browser/server communication; means for exposing a second set of functions that enable drawing and construction of client applications (Col. 14 Ln. 30 – 46); means for exposing a third set of functions that enable connectivity to data sources and XML functionality (Col. 5 Ln. 25 – 37, Col. 10 Ln. 1 – 9, Ln. 59 – 67); and means for exposing a fourth set of functions that enable system and runtime functionality (Col. 8 Ln. 22 – 28).

Roberts is silent with reference to means for translating Web applications written in different languages into an intermediate language supported by the common runtime layer.

Yach teaches means for translating Web applications written in different languages into an intermediate language supported by the common runtime layer (Translator 220 page 4 paragraph 0036).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Roberts with the teaching of Yach because the teaching of Yach would improve the system of Robert by providing a method for eliminating the complexities between different runtime program environments and thus integrating their inter-relationship (Yach page 1 paragraphs 0004/0005).

21. As to claims 20-22, see the rejection of claims 6-8 respectively.

22. As to claim 24, see the rejection of claim 19 above.

23. As to claim 25, Roberts teaches the computer implemented method as recited in claim 24, further comprising receiving a request from a remote computing device, the request containing a call to at least one of the first, second, third, and fourth functions (Col. 5 Ln. 1 – 25).

24. As to claim 31, see the rejection of claim 24 above.

25. As to claims 32-34, see the rejection of claims 6-8 above.

26. As to claim 36, see the rejection of claim 19 above.

27. As to claims 37-39, see the rejection of claim 6-8 respectively.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. **Claims 9,17,18,23,26-30,35,40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,792,605 B1 to Roberts et al. in view of U.S. Pub. No. 20020112078 A1 to Yach as applied to claim 5, and further in view of U.S. Pat. No. 5,987,517 to Firth et al.**

30. As to claim 9, Roberts teaches the application program interface as recited in claim 5, wherein the fourth group of services comprises: first functions that enable definitions of various collections of objects (Col. 8 Ln. 50 – 67); fifth functions that enable input/output of data (Col. 8 Ln. 29 – 38, Ln. 64 – 67); sixth functions that enable a programming interface to network protocol (figure 1 Col. 4 Ln. 60 – 67, Col. 5 Ln. 25 – 37); eleventh functions that enable character encoding (inherent in XML language, since XML language supports character encoding); ninth functions that enable system security and permissions (Col. 6 Ln. 7 – 9); tenth functions that enable installation and running of services (Col. 9 Ln. 27 – 35); and thirteenth functions that facilitate runtime operations (Col. 8 Ln. 22 – 28).

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Roberts is silent with reference to second functions that enable programmatic access to configuration settings and handling of errors in configuration files; third functions that enable application debugging and code execution tracing; fourth functions that enable customization of data according to cultural related information; seventh functions that enable a managed view of types, methods, and fields; eighth functions that enable culture-specific resources and twelfth functions that enable multi-threaded programming;

Firth teaches second functions that enable programmatic access to configuration settings and handling of errors in configuration files/third functions that enable application debugging and code execution tracing (Col. 13 Ln. 6 – 29); fourth functions that enable customization of data according to cultural related information/eighth functions that enable culture-specific resources (Col. 13 Ln. 6 – 29); seventh functions that enable a managed view of types, methods, and fields; twelfth functions that enable multi-threaded programming (Col. 12 Ln. 52 – 62);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify of system of Yach and Roberts with the teaching of Firth because the teaching of Firth would improve the system of Yach and Roberts by creating computer network applications by using a library of reentrant network functions which allow an application to reduce the source code required to interact with a computer network such as the internet (Firth Col. 1 Ln. 9 – 14).

31. As to claims 17,23,30,35,40 see the rejection of claim 9 above.

- 32. As to claim 26, see the rejection of claims 20-23 above.
- 33. As to claims 27-29, see the rejection of claims 6-8 respectively.
- 34. As to claims 18 and 41, see the rejection of claims 6-9 above.

Response to Arguments

Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 12/01/06 have been fully considered but they are not persuasive.

Applicant argues in substance that (1) there is no suggestion or motivation for modifying the Roberts prior art with the Yach prior art (2) the Examiner has engaged in impermissible hindsight reconstruction (3) all the limitation of claims 18,19 and 41 are not properly rejected (4) regarding claim 26, the creating namespace step is not taught by either the Roberts or Yach prior arts.

Examiner respectfully traverses Applicant's argument:

As to point (1), In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so

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found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, all the limitations of the claims are met by the Roberts and Yach prior arts and motivation to combine the references to arrive at the claimed invention is reached because each reference is directed to precisely the same problem of providing web services. In providing web services the Yach prior art enables the conversion/translation of legacy content information in a variety of formats into a common runtime program thus, providing a process for eliminating the complexities between different runtime program environments and integrating their inter-relationship.

As to point (2), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As to point (3), Applicant's argument is moot in view of the current rejection.

As to point (4), Applicant's argument is moot in view of the current rejection and dependent claims 27-30 defines the creation of first, second and third namespaces as

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the limitations listed in claims 20-23, as such claim 26 could be rejected for the same reason as claims 20-23.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-Ai can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E Anya
Examiner
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